

BREYDO, I.S., kandidat meditsinskikh nauk (Leningrad, 7-ya Sovetskaya ul., d.7, kv.7); TSIVIN, S.S.

Acute appendicitis and extrauterine pregnancy; differential diagnosis. Vest.khir. 77 no.8:90-95 Ag '56. (MIRA 9:10)

1. Iz kliniki obshchey khirurgii (zav. - prof. V.I.Kolesov) 1-go Leningradskogo meditsinskogo instituta im. I.P.Pavlova (na baze bol'nitsy im. K.Marksa)
(APPENDICITIS, differ. diag.
extrauterine pregn.)
(PREGNANCY, ECTOPIC, differ. diag.
appendicitis)

TSIVNEV, KH.

"Computing the Capacity of a Cupola Furnace", P. 32. (TESHKA
FROMISHLENOST, Vol. 3, No. 4, 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (MEAL), LC, Vol. 4,
No. 6, June 1955, Uncl.

TSIVNEV, Kh.

Charts for boring, milling, and transverse planing machines.
(TEZHKA PROMISHLENOST. Vol. 4, No. 3, 1955)

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 9,
Sept. 1955, Uncl.

TSIVNEV, Kh.

Charts for boring, milling, and transverse planing machines.
(TEZHKA PROMISHLENOST. Vol. 4, No. 4, 1955)

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 9,
Sept. 1955, Uncl.

TSIVNEV, KH.

TSIVNEV, KH. Production of high-quality cast iron with a definite structure. p.23.

Vol. 5, no. 2, 1956, TEZHKA PROMISHLENOST, SOFIYA, BULGARIA.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 10, Oct. 1956.

TSIVTSIVADZE, N. I.

"Quince Cultivation in Imereti." Cand Agr Sci, Georgian Agricultural Inst, Tbilisi, 1953. (RZhBiol, No 1, Sep 54)

SO: Sum 432, 29 Mar 55

SANADZE, V.V.; TSIVTSIVADZE, T.A.

Effect of small concentrations of titanium on the self-diffusion
of iron. Fiz. met. i metalloved. 14 no.1:135-137 J1 '62.
(MIRA 15:7)

1. Gruzinskiy politekhnicheskiy institut.
(Iron-titanium alloys—Metallography)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757120014-3

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APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757120014-3"

15000
S/139/62/000/006/007/032
E021/E151

AUTHORS:

Sanadze, V.V., Tsivtsivadze, T.A., and
Tatrishvili, K.G.

TITLE:

Influence of small concentrations of zirconium,
niobium and molybdenum on the self-diffusion of iron

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no.6,
1962, 38-43

TEXT: Alloys were prepared in a high frequency furnace in a
vacuum of 10^{-3} mm Hg. The starting materials were Armco iron,
chemically pure niobium and zirconium and 99.5% pure molybdenum.
Additions of 0.09-1.2% zirconium, 0.09-1.15% niobium and 0.14-1.1%
molybdenum were used. The cast billets were forged and homogenised
at 1150 °C for 50 hours. Specimens 5 x 5 x 25 mm were prepared and
a 2 - 3 μ radioactive layer of Fe⁵⁹ was deposited on them.
Diffusion was produced at 900-1300 °C in vacuo. The coefficient of
self-diffusion was measured by removing thin layers from the
samples and measuring the residual radioactivity of the layer.
Graphs of log. activity (ΔI) against the thickness of the layer
removed (x) were drawn. For the alloy containing 0.53% niobium at

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Influence of small concentrations ... S/039/62/000/006/007/032
E021/E151

1000 °C there was a linear relationship between $\log. \Delta I$ and x which indicated that intercrystalline self-diffusion had a predominating influence. At 1250 °C there was a linear relation between $\log. \Delta I$ and x^2 which indicated predominance of trans-crystalline diffusion. Alloys with zirconium gave similar results. Alloys with molybdenum showed a linear relationship between $\log. \Delta I$ and x^2 at 900 °C as well as higher temperatures, indicating volume diffusion. The energy of activation Q and the exponential constant D_0 were determined from the temperature-coefficient of self-diffusion. In the case of Fe-Zr alloys, Q for volume self-diffusion increased from 69 to 76.5, and Q for intercrystalline diffusion from 31.8 to 34.1 kcal/g atom with increase in zirconium content from 0.09 to 1.19 wt.%. In Fe-Nb alloys, Q increased from 72.6 to 84.6 for volume diffusion and niobium content from 0.09 to 1.15 wt.%. In Fe-Mo alloys, Q increased from 49.84 to 60.56 for volume diffusion, and from 37.04 to 40.29 for intercrystalline diffusion with increase in Mo content from 0.14 to 0.34 wt.%. With further increase to 1.10 wt.% Mo,

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Influence of small concentrations... S/139/62/000/006/007/032
E021/E151

Q decreased to 40.34 and 30.49 for volume and intercrystalline diffusion respectively.
There are 8 figures and 2 tables.

ASSOCIATION: Gruzinskiy politekhnicheskiy institut imeni
V.I. Lenina
(Georgian Polytechnical Institute imeni V.I. Lenin)

SUBMITTED: May 27, 1961, and after revision,
March 8, 1962.

Card 3/3

TSIVTSIVADZE, T.A.

Category : USSR/Solid State Physics - Diffusion. Sintering

E-6

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3885

Author : Sanadze, V.V., Tsivtsivadze, T.A.

Title : Effect of Small Concentrations of Alloying Elements on the Self Diffusion of Iron. II. Effect of Concentration of Vanadium.

Orig Pub : Tr. Gruz. politekhn. in-ta, 1956, No 1, (42), 141-144

Abstract : The temperature dependence of the coefficient of self-diffusion was studied in Fe-V alloys with 0.09, 0.242, and 0.4% vanadium by weight at 1050, 1100, and 1150°; the energy of activation of γ -iron was calculated. Alloying of iron with vanadium, even in insignificant amounts, reduces the energy of activation of self-diffusion and consequently, weakens the bonds in the crystalline lattice of the alloys. For part I see Referat. Zh. Fizika, 1956, 13479.

Card : 1/1

ESIVTSIVALZE, I. I.

"Effect of the Partial Removal of Blood During the Life Span on the Fattening of Steers." Thesis for degree of Cand. Agricultural Sci. Sub. 24 Jun 49, Moscow Veterinary Academy.

■ Summary 32, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering in Moscow in 1949. From Vechernaya Moskva. Jan-Dec 1949.

TSIVUNIN, V.S.; KAMAY, Gil'm; MAKEYEVA, G.K.

Derivatives of ethyl- α -chlorovinyl- and ethyl- β -chlorovinylphosphonic acids. Dokl. AN SSSR 135 no.5:1157-1159 D '60. (MIRA 13:12)

1. Kazanskiy khimiko-tehnologicheskiy institut im. S.M.Kirova.
Predstavлено академиком A.Ye.Arbuzovym.
(Phosphonic acid)

TSIVUNIN, V.S.; KAMAY, Gil'm; SHAGIDULLIN, R.R.; KHISAMUTDINOVA, R.Sh.

Condensation reaction of diethyl(diphenyl)-chlorophosphine
with α , β -dichloroethyl alkyl ethers. Zhur. ob. khim. 35
no.10:1811-1814 0 '65. (MIRA 18:10)

TSIVUNIN, V.S.; KAMAY, Gil'm; KHISAMUTDINOVA, R.Sh.

Synthesis of thiooxides of diethyl (diphenyl)- α -(alkoxy)-
ethylphosphines, ω -(alkoxy)vinylphosphines, and α -(vinoxy)
ethylphosphines. Zhur. ob. khim. 35 no.10:1815-1817 O '65.
(MIRA 18:10)

KAMAY, Gil'm; TSIVUNIN, V.S.; NURTDINOV, S.Kh.

Preparation of β, β -dimethylvinylphosphinyl dichloride and some
of its derivatives. Zhur. ob. khim. 35 no.10:1817-1819 O '65.
(MIRA 18:10)

TSIVUNIN, V.S.; KAMAY, G.Kh.; KORMACHEV, V.V.

Aliphatic-aromatic oxides and phosphine monosulfides. Zhur.
ob. khim. 35 no.10:1819-1821 0 '65. (MIRA 18:10)

1. Kazanskiy khimiko.tehnologicheskiy institut imeni S.M. Kirova.

L 3396-66 EWT(m)/EPF(c)/EWP(j)/T/ETC(m) WW/RM

ACCESSION NR: AP5024219

UR/0020/65/164/003/0594/0597

AUTHORS: Tsvivunin, V. S.; Kamay, G.; Khisamutdinova, R. Sh.

38

32

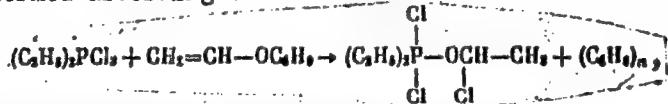
3.

TITLE: On the complex formation of simple vinyl ethers with pentavalent phosphorus chlorides

SOURCE: AN SSSR. Doklady, v. 164, no. 3, 1965, 594-597

TOPIC TAGS: complex formation, vinyl ether, phosphorus pentachloride, phosphorus organic compound

ABSTRACT: The complexes formed during the reaction of simple vinyl ethers with pentavalent phosphorus chlorides were studied. In particular, the nature of the thermal degradation products of the complexes studied was determined. It was found that thermal degradation of the PCl_5 vinyl ether complex yielded different products than the degradation of diethyl- and diphenyltrichlorophosphorus-vinyl-ether complexes. The behavior of the diethyltrichlorophosphorus-n-butylvinyl-ether complex, formed according to the scheme

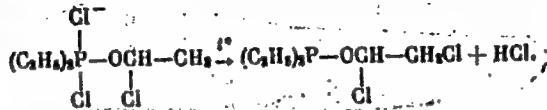


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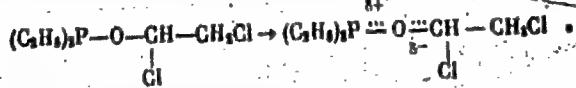
L 3396-66

ACCESSION NR: AP5024219

is discussed in some detail. The thermal degradation of this complex is assumed to follow the scheme



The different behavior of phosphorus pentachloride and alkyl or aryl substituted pentavalent phosphorus chloride-vinylether complexes during thermal degradation is attributed to the different utilization of the d orbitals of phosphorus in the formation of the above complexes. IR spectra of diethyl- α -chloroethoxydichlorophosphorus, the acid chloride of diethylphosphinic acid, and α , β -dichloroethyl ether of diethylphosphinic acid were determined and are shown graphically. The existence of the last ether is attributed to the presence of the stabilizing structure:



The authors thank R. R. Shagidullin for the determination of the IR spectra.
Orig. art. has: 1 graph and 10 equations.

ASSOCIATION: Kazanskiy khimiko-tehnologicheskiy institut im. S. M. Kirova (Kazan)
Chemical Engineering Institute) 44-55
Card 2/3

L 3396-66

ACCESSION NR: AP5024219

SUBMITTED: 28Dec64

ENCL: 00

SUB CODE: OC, GC

NO REF Sov: 004

OTHER: 002

Card 3/3 mb

ACC NR: AP6028899

SOURCE CODE: UR/0079/66/036/008/1430/1433

AUTHOR: Tsivunin, V. S.; Kamay, G. Kh.; Kormachev, V. V.; Ukader, G. S.

ORG: Kazan Chemical Technology Institute im. S. M. Kirov (Kazanskiy khimiko-tehnologicheskiy institut)

TITLE: Reactions of dialkylchlorophosphine with dibromoalkanes and bis(chloromethyl)ester

SOURCE: Zhurnal obshchey khimii, v. 36, no. 8, 1966, 1430-1433

TOPIC TAGS: brominated organic compound, dialkylchlorophosphine, dibromoalkane, alkylidiphosphine dithioxide, chlorinated organic compound, organic phosphorus compound, alkylphosphine, alkane,

ABSTRACT: The addition of $(C_2H_5)_2PCl$ to 1,2-dibromomethane, 1,3-dibromopropane, and bis(chloromethyl) ether was studied under various conditions and with various reagent ratios. It is shown that on boiling (on a water bath), dibromoethane and bis(chloromethyl) ether add mainly two molecules of $(C_2H_5)_2PCl$ to form the corresponding adducts. At 100—129°C, 1,3-dibromopropane adds one or two molecules of $(C_2H_5)_2PCl$ to form the corresponding mono- or diadducts. Decomposition of the adducts with alcohols, water, or H_2S yielded the corresponding compounds Ia (bp 180°C, d_4^{20} 1.1164, n_D^{20} 1.4919), Ib (bp 199—200°C),

Card 1/2

UDC: 546.181.1+547.412

ACC NR: AP6028899

IIIa (mp 125-126°C), IIIb (mp 8615°C), IIIa (mp 127-128°C), IIIb
(mp 81.50°C), IV (bp 153-154°C), and V (bp 91-92°C).

[WA-50; CBE No. 11]

SUB CODE: 07/ SUBM DATE: 06Sep65/ ORIG REF: 003/ OTH REF: 001/

Card 2/2

1 27763-66 ENT(m)/EWP(j) RM
ACC NR: AP6018505

SOURCE CODE: UR/0079/65/035/011/1998/2001

27
B

AUTHOR: Tsivunin, V. S.; Kamay, G.; Shagidullin, R. R.; Khisamutdinova, R. Sh.

ORG: none

TITLE: Condensation of diethyl- and diphenylchlorophosphine with alpha-chloroaldehydes

SOURCE: Zhurnal obshchey khimii, v. 35, no. 11, 1965, 1998-2001

TOPIC TAGS: condensation reaction, aldehyde, chlorinated organic compound, organic phosphorus compound

ABSTRACT: Diethyl (and diphenyl)chlorophosphines were found to form complexes with alpha-chloroaldehydes. The reaction proceeded exothermally when the components were mixed in bulk or in an inert solvent (diethyl ether). Oxides and thiooxides of diethyl(diphenyl)-alpha-hydroxy-beta-chloro-(beta,beta,beta-trichloro)-ethylphosphines were isolated by decomposing the complexes with alcohols or hydrogen sulfide, respectively. The condensation of secondary chlorophosphines with chloro-aldehydes, followed by nucleophilic decomposition of the complexes with water or of dialkyl(or diaryl)-alpha-hydroxyethylphosphines. Orig. art. has: 1 figure and 6 formulas. [JPRS]

SUB CODE: 07/ SUBM DATE: 17Dec64 / ORIG REF: 004/ OTH REF: 002

Card 1/1

UDC: 546.185/547.446.1:541.49

L 31277-66 EWT(m)/EWP(j) RM

ACC NR: AP6022795

SOURCE CODE: UR/0079/66/036/002/0271/0273

76
63

AUTHOR: Tsivunin, V. S.; Kamay, G. Kh.; Kormachev, V. V.

ORG: Kazan' Chemicotechnological Institute im. S. M. Kirov (Kazanskiy khimiko-tehnologicheskij institut)

TITLE: Reaction of secondary chlorophosphines with chloromethylalkyl sulfides

SOURCE: Zhurnal obshchey khimii, v. 36, no. 2, 1966, 271-273

TOPIC TAGS: chlorinated organic compound, organic phosphorus compound, organic sulfur compound, chemical decomposition, organic oxide, chemical synthesis

ABSTRACT: Diethylchlorophosphine and diphenylchlorophosphine react with chloromethylalkyl sulfides to form diethyl(diphenyl)mercaptoalkylmethyldichlorophosphines. Decomposition of the complexes with water, alcohols, or hydrogen sulfide yielded the corresponding phosphine oxides and thioxides. Five oxides and five thioxides were synthesized and characterized. Orig. art. has: 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 22Feb65 / ORIG REF: 002

Card 1/1 87

UDC: 546.181.1 + 547.279.1
091.5

0774

ACC NR: AP6033178

SOURCE CODE: UR/0079/66/036/010/1827/1830

AUTHOR: Tsivunin, V. S.; Kamay, G. Kh.; Nurtdinov, S. Kh.

ORG: none

TITLE: Reactions of diethylchlorophosphine with derivatives of α, β -unsaturated acids

SOURCE: Zhurnal obshchey khimii, v. 36, no. 10, 1966, 1827-1830

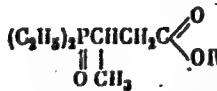
TOPIC TAGS: alkylphosphinylpropionic acid ester, ~~alkylchlorophosphine-1-~~
~~ester~~ acrylic acid, methacrylic acid, organic phosphorus
Compound

ABSTRACT: Diethylchlorophosphine reacts with unsaturated acids (crotalic, acrylic, and methacrylic) and their chlorides in heptane at -15 to -20°C to form the corresponding adducts. Decomposition with alcohols of the adducts from crotalic acid (or its chloride) and diethylchlorophosphine at 60—70°C gave the corresponding esters shown in Table 1.

Card 1/4

UDC: 546.181.1+547.39:547.393.3

ACC NR: AP6033178

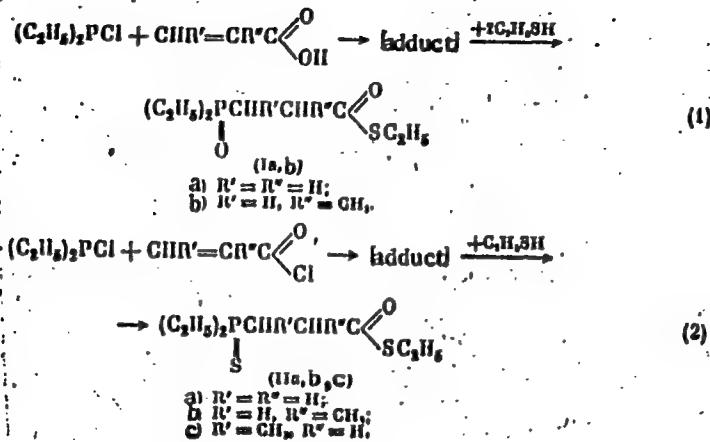
Table 1. Esters of β -methyl- β -diethylphosphenyl-propionic acid

Com- ound no.	R	Yield (%)	bp (p in mm)	d ₄ ²⁰	n _D ²⁰	M.R.		d ₄ calcd for C ₁₀ H ₂₁ O ₃ P	Formula	Calc'd Z P
						found	calcd			
I	CH ₃	48	144-146°(2)	1.0740	1.4721	53.80	54.04	14.84 15.85	C ₁₀ H ₂₁ O ₃ P	15.02
II	C ₂ H ₅	41	158-159(4)	1.0480	1.4698	58.60	58.85	13.49 13.70	C ₁₀ H ₂₁ O ₃ P	14.07
III	C ₃ H ₇	54	163-165(3)	1.0280	1.4685	63.27	63.27	13.60 13.75	C ₁₁ H ₂₃ O ₃ P	13.22
IV	C ₄ H ₉	54	182-184 (4.5)	1.0160	1.4650	67.51	67.89	12.17 12.87	C ₁₂ H ₂₅ O ₃ P	12.47
V	C ₆ H ₁₃	48	188-190(5)	1.0120	1.4630	72.44	72.51	11.90 11.67	C ₁₃ H ₂₇ O ₃ P	11.89

Decomposition of the adducts with ethylmercaptan proceeds in two ways:

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ACC NR AP6033178



to form Ia and Ib or IIa, IIb, and IIc, which are given in Table 2.
Orig. art. has: 2 tables. [W.A. 50]

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ACC NR: AP6033178

Table 2. Ethyl esters of β -diethylphosphinyl (Ia, Ib) and β -diethylthiophosphinylpropionic acids

Com- ound No.	X	R'	R"	Yield (in %)	bp (p in mm)	d ²⁰	n _D ²⁰	M.R.		Found %		Formula	Calc'd %	
								Found	Calc'd	P	S		P	S
Ia	O		H	48	170 ^a (3.5)	1.030	1.5106	60.38	60.40	14.40	14.71	C ₆ H ₁₂ O ₂ PS	13.94	14.41
Ia	S		CH ₃	32	158-161(1.8)	1.0750	1.5020	64.88	65.02	18.50	14.00	C ₆ H ₁₂ O ₂ PS	13.11	13.57
Ib	S		H	44	172-173(3)	1.0920	1.5458	68.01	68.72	13.39	27.50	C ₆ H ₁₂ O ₂ PS ₂	12.99	28.90
Ib	S	CH ₃	CH ₃	50	165-168(1)	1.0710	1.5362	73.59	73.24	12.00	24.74	C ₆ H ₁₂ O ₂ PS ₂	12.28	25.43
Ib	S	CH ₃	H	53	170-172(2)	1.0780	1.5438	73.75	73.34	13.50	25.04	C ₆ H ₁₂ O ₂ PS ₂	12.26	25.43

SUB CODE: 07/ SUBM DATE: 160ct65/ ORIG REF: 002.

Card 4/4

411399-67 ENT(m)/EXP(j) RM
ACC NR: KP7003655

SOURCE CODE: UR/0079/66/036/008/1424/1430

33

AUTHOR: Tsivumin, V. S. Fridland, S. V.; Zykova, T. V.; Knunay, G. Kh.
ORG: Kazan' Chemicotechnological Instituto im. S. M. Kirov (Kazanskiy khimiko-
tekhnologicheskiy institut)

TITLE: Reaction of phosphorus pentachloride with divinyl ether

SOURCE: Zhurnal obshchey khimii v. 36, no. 8, 1966, 1424-1430

TOPIC TAGS: phosphorus chloride, vinyl compound, ester, organic
phosphorus compound, NMR spectrum

ABSTRACT: 2,2,2-Trichloro-1-oxa-2-phospholeno-3-methylene-5- was isolated
by the reaction of phosphorus pentachloride with divinyl ether, identified by
a study of its infrared spectrum and reactions with acetic acid, acetic anhydride,
ethyl acetate, and bromine, heating at 160-165°, and a study of the proton
magnetic resonance and double nuclear-nuclear resonance spectra. Treatment
of the compound synthesized with nucleophilic agents yielded 2-chloro-1-oxa-
2-phospholene-3-methylene-5-oxide-2, further reactions of which yielded a series
of derivatives with an oxaphospholene ring. The structures of 2-chloro-1-oxa-
2-phospholene-3-methylene-5-oxide-2 and 2-isobutoxy-1-oxa-2-phospholene-3-
methylene-5-oxide-2 were studied by the nuclear magnetic resonance and double
nuclear-nuclear magnetic resonance methods. The participation of the oxygen
atom in the original reaction of PCl_5 with divinyl ether, was confirmed.
Orig. art. has: 2 figures and 1 table. (JPRS: 38,970)

SUB CODE: 07 / SUBM DATE: 10Jul65 / ORIG REF: 004 / OTH REF: 001

UDC: 547.37 + 547.3 + 1.2 + 546.185'131

07/26 0277

Card 1/1 3b

TSIVUNIN, V. S.

43

PHASE I BOOK EXPLOITATION

SOV/6034

Konferentsiya po khimii i primeneniyu fosfororganicheskikh soyedineniy. 2d.
Kazan', 1959.

Khimii i primeneniye fosfororganicheskikh soyedineniy; trudy (Chemistry
and Use of Organophosphorus Compounds; Conference Transactions) Moscow,
Izd-vo AN SSSR, 1962. 630 p. Errata slip inserted. 2800 copies printed.

Sponsoring Agency: Akademiya nauk SSSR, Kazanskiy filial.

Resp. Ed.: A. Ye. Arbuzov, Academician; Ed. of Publishing House: L. S.
Povarov; Tech. Ed.: S. G. Tikhomirova.

PURPOSE: This collection of conference transactions is intended for chemists,
process engineers, physiologists, pharmacists, physicians, veterinarians,
and agricultural scientists.

COVERAGE: The transactions include the full texts of most of the scientific
papers presented at the Second Conference on the Chemistry and Use of

Card 1/14

43

Chemistry and the Use of Organophosphorus (Cont.)

SOV/6034

Organophosphorus Compounds held at Kazan' from 2 Nov through 1 Dec 1959. The material is divided into three sections: Chemistry, containing 67 articles; Physiological Activity of Organophosphorus Compounds, containing 26 articles; and Plant Protection, containing 12 articles. The reports reflect the strong interest of Soviet scientists in the chemistry and application of organophosphorus compounds. References accompany individual reports. Short summaries of some of the listed reports have been made and are given below.

TABLE OF CONTENTS:[Abridged]:

Introduction (Academician A. Ye. Arbuzov)

3

TRANSACTIONS OF THE CHEMISTRY SECTION

Gefter, Ye. L. [NII plastmass (Scientific Research Institute of Plastics, Moscow]. Some Prospects for the Industrial Use of Organophosphorus Compounds

46

Card 2/14

Chemistry and the Use of Organophosphorus (Cont.)

SOV/6034

Lutsenko, I. F., Z. S. Krayts, and A. P. Bokovoy. [Moskovskiy gosudarstvenny universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)]. Vinyl Esters of Acids of Phosphorus

305

Vinyl esters of phosphorous, phosphorothioic, phosphonic, and α -ketophosphonic acids, as well as substituted vinyl esters of phosphorous and phosphoric acids, have been obtained and their properties described. The methods used in obtaining the esters have also been described in detail.

Chang, Jung-Yli. [Institute of Organoelemental Compounds]. Esters of Unsaturated Phosphonic Acids

310

Esters of unsaturated phosphonic acids have been synthesized and for the first time described in the scientific literature. The methods of synthesis are described in detail.

Kamay, Gil'm, and V. S. Tsivunin [Kazan' Institute of Chemical Technology imeni S. M. Kirov]. Some Derivatives of Ethylalkenyl Phosphonic Acids

317

Card 9/14

SOV/20-128-3-30/58

5(2,3)
AUTHORS: Kamay, G., Tsivunin, V. S.

TITLE: Some Esters of Ethyl-vinyl and Ethyl-allyl Phosphinic Acids

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 3, pp 543-546
(USSR)ABSTRACT: The present paper continues the investigations carried out since 1948 in the authors' laboratory concerning the synthesis and polymerization of the unsaturated esters of phosphoric acids. The synthesis of the esters mentioned in the title was carried out in several stages (see Diagram). The interaction of ethyl-dichlorophosphine (Ref 6) with ethylene oxide easily proceeds in the medium of absolute ethyl ether. According to the number of ethylene-oxide molecules involved in the reaction, an acid chloride of β -chloro-ethoxy-ethyl-phosphinous acid, and the di- β -chloro-ethyl ester of ethyl-phosphinous acid are formed. The latter ester is a colorless liquid with a weak phosphine odor. It is stable in distillations, but oxidizes slowly in the air. It reacts violently with sulphur, and under considerable heat formation with cuprous chloride. These two facts suggest the trivalent structure of the phosphorus .

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SOV/20-128-3-30/58

Some Esters of Ethyl-vinyl and Ethyl-allyl Phosphinic Acids

M. I. Kabachnik and P. A. Rossiyskaya (Ref 7) ascertained that the presence of halogen atoms in the tris- β -chloro-ethyl phosphite at increased temperatures causes an internal regrouping of the ester due to a transition of the phosphorus from the trivalent to the pentavalent structure. As was expected, the isomerization of the di- β -chloro-ethyl ester of ethyl-phosphinous acid to a corresponding ester of ethyl- β -chloro-ethyl-phosphinic acid proceeded easily. Already after heating the ester in boiling ethyl benzene (in nitrogen atmosphere under intensive stirring) for 1 hour, the ester of the trivalent phosphorus compound disappeared: it was isomerized almost completely. The esters mentioned in the title were obtained by an interaction of the acid chloride with corresponding alcohols in the medium of absolute ether in the presence of pyridine. They are colorless, easily movable liquids (except for β -chloro-ethyl ester), mixible with water, and have a weak, but agreeable fruit odor. Their constants are shown in table 2. The esters of ethyl-allyl-phosphinic acid were obtained by Arbuzov's regrouping of corresponding esters of ethyl-phosphinous acid (Refs 8, 9) by allyl bromide. All

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SOV/2o-128-3-30/58

Some Esters of Ethyl-vinyl and Ethyl-allyl Phosphinic Acids

esters of this acid are colorless, easily movable liquids with a weak, but somewhat sharp odor. They are easily mixible with water at room temperature (except for isoamyl ester). Their constants are shown in table 2 (Abstracter's note: misprint, the said constants are shown in the 2nd part of table 1). The authors carried out preliminary polymerization experiments with both types of ester. The results are given in brief. There are 1 table and 9 references, 7 of which are Soviet.

ASSOCIATION: Kazanskiy khimiko-tehnologicheskiy institut im. S. M. Kirova (Kazan' Institute of Chemical Technology imeni S. M. Kirov)

PRESENTED: May 25, 1959, by A. Ye. Arbuzov, Academician

Card 3/4

53630

2209, 1266, 1281

86839

S/020/60/135/005/029/043
B016/B052

AUTHORS:

Tsivunin, V. S., Gil'm Kamay, and Makeyeva, G. K.

TITLE:

Derivatives of Ethyl- α -chloro-vinyl and Ethyl- β -chloro-vinyl Phosphinic AcidsPERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 5,
pp. 1157-1159

TEXT: The authors report on the determination of the structure of acid chlorides of ethyl- α , β -dihalogen ethyl phosphinic acids. For this purpose they ozonized propyl and isobutyl esters of ethylchloro-vinyl phosphinic acid, and identified the decomposition products by means of dimedone. In both cases, a crystalline product was isolated, which corresponded to the condensation product of dimedone with formaldehyde (melting point, 189.5°C). The authors therefore believed that the halogen in the vinyl radical has an α -position. So far, this has not been proved. The results showed that acid chlorides of ethyl- α -halogen vinyl phosphinic acids are formed by thermal or catalytic dehydrohalogenation of the above-mentioned acid chlorides. The authors also synthesized derivatives of ethyl- β -

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86839

Derivatives of Ethyl- α -chloro-vinyl and
Ethyl- β -chloro-vinyl Phosphinic Acids

S/020/60/135/005/029/043
B016/B052

halogen vinyl phosphinic acids and compared their physical constants and properties with those of the known derivatives of acid whose halogen is bound to the carbon atom. Contrary to their expectations (according to data by K. N. Anisimov and A. N. Nesmeyanov, Ref. 3), the suspension of ethyl tetrachlorophosphine disappeared from its reaction mixture with butyl-vinyl ether the more quickly, the larger the addition of vinyl ether. It completely dissolved as soon as the reagents reached an equimolar ratio. By distillation (after the reaction medium - absolute benzene - had been distilled off) and treatment in a vacuum, the authors obtained also a fraction corresponding to the acid chloride of ethyl chloro-vinyl phosphinic acid. It was a yellowish, mobile liquid with a somewhat strong smell which fumed when exposed to air, and was decomposed by water. When added to bromine or its solution in chloroform, it showed no visible reaction, although after a few days bromine was decolorized. A product identical with these acids was obtained by reaction of ethyl tetrachlorophosphine with vinyl isopropyl ether. In the presence of pyridine, the ethyl ester of ethyl- β -chlorovinyl phosphinic acid was formed by reaction of the product obtained with ethanol in absolute diethyl ether. From their results and the infrared spectra the authors concluded that the reaction

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86839

Derivatives of Ethyl- α -chloro-vinyl and
Ethyl- β -chloro-vinyl Phosphinic Acids

S/020/60/135/005/029/043
B016/B052

of vinyl ether with ethyl tetrachlorophosphine differs considerably from that with phosphorus pentachloride (Ref. 3). In this case, the acid chloride of ethyl- β -chloro-vinyl phosphinic acid is formed according to the

following scheme: $\text{CH}_2=\text{CHOR} + \text{C}_2\text{H}_5\text{PCl}_4 \longrightarrow \text{C}_2\text{H}_5\text{P}(\text{OCl})_2\text{CH}_2\text{CHCl} + \text{RCl} + \text{HCl}$. Examina-

tions of the above-mentioned reaction are being continued. R. V. Lindval' and N. V. Oslina are thanked for spectral analyses. M. I. Kabachnik and T. Ya. Medved' are mentioned. There are 4 Soviet references.

ASSOCIATION: Kazanskiy khimiko-tehnologicheskiy institut im. S. M. Kirova (Kazan' Institute of Chemical Technology imeni S. M. Kirov)

PRESENTED: July 7, 1960, by A. Ye. Arbuzov, Academician

SUBMITTED: July 4, 1960

Card 3/3

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Khimiya i Primeneniye Fosfororganicheskikh Soyedinenii (Chemistry and Application of Organophosphorus Compounds) A. Ye. Arbuzov, Ed. publ. by Kazen' Affil, Acad. Sci. UESR, Moscow, 1962 632pp.

Collection of complete papers presented at the 1959 Knzen Conference on Chemistry of Organophosphorus Compounds.

26199
S/081/61/000/012/028/028
B103/B202

15-8110

AUTHORS:

Abramov, V. S., Tsivunin, V. S.

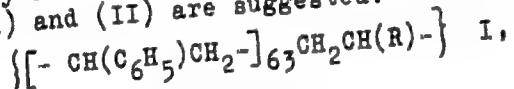
TITLE:

Esters of vinyl phosphinic acid and their polymerizability

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 12, 1961, 715, abstract
12P140. (Tr. Kazansk. khim.-tekhnol. in-ta, 1959, vyp. 26,
96-103)

TEXT: The authors synthesized isobutyl ester of β -bromo ethyl phosphinic acid and vinyl phosphinic acid. In the polymerization of the disobutyl ester of vinyl phosphinic acid (I) a viscous colorless compound with low degree of polymerization is formed in the mass (initiator - benzoyl diazoperoxide or paraffon, temperature 80-90°C). In the block copolymerization of I with styrene or methyl methacrylate (temperature 6 and 90°C, respectively, initiator - benzoyl peroxide) solid or rubber-like products are formed with low combustibility and self-extinguishability. The following formulas of the copolymers (I) and (II) are suggested:

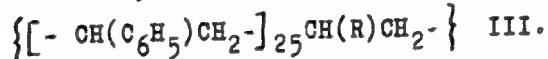
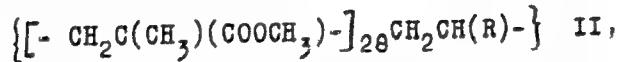


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Card 1/2

26199
S/081/61/000/012/028/028
B103/B202

Esters of vinyl phosphinic acid ...



A thermoplastic copolymer (in the form of latex) corresponding to formula (III) where R (iso-C₄H₉O)₂P—O was obtained in the emulsion polymerization of (I) with styrene (20-100°C, 20 hr, initiator: paraphen). [Abstracter's note: Complete translation.]

Card 2/2

B1

L 17731-63 EWP(j)/EPF(c)/EWT(m)/BDS ASD Pc-4/Pr-4 RM/WW
ACCESSION NR: AP5004286 S/0079/63/033/007/2146/2149

AUTHORS: Tsvunin, V. S.; Kamay, Gil'm; Fridland, S. V.

155

TITLE: Derivatives of Beta-chloroethoxyvinyl phosphonic acid

SOURCE: Zhurnal obshchey khimii, v. 33, no. 7, 1963, 2146-2149

TOPIC TAGS: chloroethyl, vinyl, ether, phosphorus pentachloride, phosphonic acid chloride, ester, polymer, phosphonic acid

ABSTRACT: The reaction of Beta-chloroethoxyvinyl with two moles of phosphorus pentachloride followed by decomposition of the resulting complex with sulfur dioxide gave chloroethoxyvinylphosphonic acid dichloride in 46.5% yield when a catalytic amount of iodine was added in the first step. Eight esters were prepared from the acid chloride and alcohols in the presence of pyridine. The dimethyl and diethyl esters were dehydrochlorinated with alkali to esters of vinyloxyvinylphosphonic acid. The diethyl ester of this acid and the dialkyl ester of chloroethoxyvinylphosphonic acid polymerized under the influence of benzoyl peroxide. Orig. art. has: 2 tables.

ASSOCIATION: none

Card 1/8

L 111.2-63EWP(j)/EPF(c)/EWT(m)/BDS ASD Pe-4/Pr-4 RM/WW
S/0079/63/033/007/2149/2153

ACCESSION NR: AP3004287

AUTHORS: Tsivunin, V. S.; Kamay, Gil'm; Sultanova, D. B.TITLE: Reaction of ethyltetrachlorophosphine with simple vinyl ethers

SOURCE: Zhurnal obshchey khimii, v. 33, no. 7, 1963, 2149-2153

TOPIC TAGS: ethyltetrachlorophosphine, phosphine, chloroethyl vinyl ether, vinyl, ether, phosphic acid, phosphonic acid chloride, adduct

ABSTRACT: In continuation of an earlier study of the reaction of butyl- and isopropylvinyl ethers with ethyltetrachlorophosphine, the present work concerns the reaction of β -chloroethylvinyl and butyl-vinyl ethers with the same phosphine. Decomposition of the resulting complexes with sulfur dioxide gave the chlorides of ethylbutoxy-vinyl- and ethyl- α -chlorovinylphosphic acid chloride. The mechanism for the thermal decomposition of the complex was confirmed by the isolation of dichloroethane from the adduct of β -chloroethylvinyl ether. Orig. art. has: no figures, formulas, or tables.

ASSOCIATION: Kazan Chemical Engineering Institute.

Card 1/2

LEBEDEVA, L.V., kand. med. nauk; ROGOVAYA, V.F.; Kholina, V.M.; VLASOVA, N.A.; TSIV'YAN, L.S.

Significance of chemoprophylaxis and its methodology in the treatment of children with the first signs of positive tuberculin test. Prob. tub. no.1:3-8 '65. (MIRA 18:12)

1. Dispansernoje otdeleniye (zav.- kand. med. nauk Ye.A. Ginzburg) Moskovskogo instituta tuberkuleza (dir.- kand. med. nauk T.P. Mochalova, zamestitel' direktora po nauchnoy chasti - prof. D.D. Aseyev) Ministerstva zdravookhraneniya RSFSR i 16-y protivotuberkuleznyy dispanser Moskvy (glavnnyy vrach P.A. Zal'munin).

TSIV'YAN, L.Ya.

Free dermatoplasty of the gluteal region under septic conditions
following severe pelvic injury. Ortop., travm. i protez. 20 no.11:
78-80 N '59. (MIRA 13:4)

1. Iz Novosibirskogo nauchno-issledovatel'skogo instituta travma-
tologii i ortopedii (direktor - dotsent D.P. Metelkin).
(SKIN TRANSPLANTATION)
(PELVIS wds. & inj.)
(BUTTOCKS surg.)

TSIV'YAN L. YA., DOCENT

三

User/Electricity

Rural Electrification

卷之三

Characteristics of type P-41-6 ("Ural") induction motor developing a power of 2.7 kw at 960 rpm. This motor uses a split stator winding to fulfill the farmer's need for a motor which will service a number of tar needs.

二

USER/Electricity (Contd.)

USER/Electricity
machines of different powers. Farmers should be able to use this motor 2,500 hours per year, and thus cut in half the number of motors used.

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64

54/49735

TSIV'YAN, Ya.L., kandidat meditsinskikh nauk.

Volvulus of the gallbladder. Khirurgiia no.2:76-77 P '54. (MIRA 7:5)

1. Iz khirurgicheskogo otdeleniya (zaveduyushchiy M.M.Sobstel')
4-y gorodskoy klinicheskoy bol'nitsy Novosibirska (glavnnyy vrach
I.M.Gol'dshteyn).
(Gall bladder--Diseases)

TSIV'YAN

TSIV'YAN, Ya.L., kandidat meditsinskikh nauk

Case of severe combined trauma in a child. Ortop.travm. i protez.
no.3:56-58 My-Je '55. (MLRA 8:10)

1. Iz Novosibirskogo nauchno-issledovatel'skogo instituta ortopedii
i vosstanovitel'noy khirurgii (dir.dotsent D.P.Metelkin) i
khirurgicheskogo otdeleniya 4-y gorodskoy klinicheskoy bol'nitsy
(glavnnyy vrach--K.S.Dement'yev)

(WOUNDS AND INJURIES,

abdom. & pelvis, case report)

(ABDOMEN, wounds and injuries,

multiple of abdom. & pelvis, case report)

(PELVIS, wounds and injuries,

multiple of abdom. & pelvis, case report)

TSIV'YAN, Ya.I., kandidat meditsinskikh nauk.(Novosibirsk)

Injury of a lower abdominal artery from puncture of the abdominal wall in ascites. Klin. med., 33 no.10:81-82 0 '55. (MIRA 9:2)

1. Iz Novosibirskogo nauchno-issledovatel'skogo instituta ortopedii i vosstanovitel'noy khirurgii (dir.--dotsent D.P. Meteklin) i khirurgicheskogo otdeleniya 4-y gorodskoy klinicheskoy bol'nitsy (glavnnyy vrach K.A. Dement'yev)

(ABDOMEN, hemorrhage,
caused by inj. of abdom. artery in puncture of abdom.
wall for ascites)

(HEMORRHAGE
abdomen, caused by inj. of abdom. artery in puncture
for ascites)

(ASCITES, therapy,
puncture of abdom. wall, causing inj. of abdom. aorta)

TSIV'YAN, Ya.L., kandidat meditsinskikh nauk, Novosibirsk, ul. Urtskogo
a.23, kv.6.

Fat embolism in intraosseous anesthesia. Vest.khir. 75 no.5:106-
107 Je '55. (MLRA 8:10)

1. Iz ogdeleniya ortopedii i travmatologii (zav.-dots. S.I.
Kutnevskiy) Novosibirskogo nauchno-issledovatel'skogo insti-
tuta ortopedii i vosstanovitel'noy khirurgii.
(ANESTHESIA, LOCAL,
intraosseous, with fat embolism)
(EMBOLISM,
fat, in intraosseous anesth.)

TSIV'YAN, Ya. L., starshiy nauchnyy sotrudnik; IVANOV, N.N., starshiy nauchnyy sotrudnik

X-ray contrast prosthesis of the head of the femur, made out of plastic material. Ortop. travm. i protez. 17 no.6:131 N-D '56.

(MLRA 10:2)

1. Iz Novosibirskogo nauchno-issledovatel'skogo instituta ortopedii, travmatologii i восстановительной хирургии (direktor - dotsent D.P. Metelkin)

(PROSTHESIS) (FEMUR--RADIOGRAPHY)

TSIV'YAN, Ya.L., kandidat meditsinskikh nauk

A case of cure in massive combined injuries. Ortop., travm. i proter.
18 no.2:42-43 Mr-Apr '57. (MLRA 10:8)

1. Iz otdeleniya travmatologii i ortopedii (zav. - prof. S.L.Shneyder)
Novosibirskogo nauchno-issledovatel'skogo instituta ortopedii, travma-
tologii i vosstanovitel'noy khirurgii (dir. - dotsent D.P.Metelkin)
(WOUNDS AND INJURIES, case reports
multiple inj.)

TSIV'YAN, Ya. L., kand.med.neuk

Technique of extra-articular osteosynthesis in fractures of the neck of the femur. Ortop.travm. i protez. 18 no.6:49 N-D '57.
(MIRA 11:4)

1. Iz kliniki ortopedii i travmatologii (zav. - dotsent S.I. Kuntovskiy) Novosibirskogo nauchno-issledovatel'skogo instituta ortopedii i vosstanovitel'noy khirurgii (dir. - dotsent D.P. Metelkin)

(FEMUR--SURGERY)

TSIV'YAN, Ya.L., kand.med.nauk

Apparatus for exercise therapy following arthroplasty of the hip joint in case of loss of function of the arms. Ortop.travm. i protez. 20 no.2:43-44 F '59.

(MIRA 12:12)

1. Iz Novosibirskogo nauchno-issledovatel'skogo instituta travmatologii i ortopedii (dir. - dots. D.P. Metelkin).
(HIP, surg.

arthroplasty, appar. for postop. exercise ther. in loss of arm funct. (Rus))

(EXERCISE THERAPY, appar. & instruments

appar. for exercise after arthroplasty of hip joint in loss of arm funct. (Rus))

TSIV'YAN, Ya.L., starshiy nauchnyy sotrudnik

Alloarthroplasty of the hip joint in clinical practice. Ortop.
travm. i protez. 20 no.7:21-28 J1 '59. (MIRA 12:10)

1. Iz otdeleniya travmatologii i ortopedii Novosibirskogo
nauchno-issledovatel'skogo instituta travmatologii i ortopedii
(dir. - dotsent D.P.Metelkin).
(HIP surg.)

TSIV'YAN, Ya. L., Doc Med Sci -- (diss) "Intra-joint prosthesis of the coxofemoral joint in experimentation and in the clinical aspect." Novosibirsk, 1960. 39 pp; (Tomsk State Medical Inst); 250 copies; price not given; list of author's work on pp 37-38 (18 entries); (KL, 27-60, 158)

TSIV'YAN, Ya.L., starshiy nauchnyy sotrudnik

Sliding splint for stretching the lower extremity in a horizontal plane. Ortrop.travm.i protez. 21 no.3: 52-53 Mr '60. (MIPA 14:3)

1. Iz otdeleniya travmatologii i ortopedii (zav. - Ya.L.TSiv'yan) Novosibirskogo nauchno-issledovatel'skogo instituta travmatologii i ortopedii (dir. - dotsent D.P. Metelkin).
(ORTHOPEDIC APPARATUS)

TSIV'YAN, Ya.L., starshiy nauchnyy sotrudnik

Osteotomy of the spine for correction of severe deformity -
following tuberculous spondylitis. Ortop., travm.i protez.
no.10:73-76 '61. (MIRA 14:10)

1. Iz otdeleniya ortopedii i travmatologii (zav. - Ya.L. TSiv'yan)
Novosibirskogo nauchno-issledovatel'skogo instituta ortopedii
i travmatologii (dir. - dotsent D.P. Matelkin).
(SPINE--TUBERCULOSIS) (OSTEOTOMY)

TSIV'YAN, Ya. L.; RAMIKH, Ye. A.

Surgical fixation of the spine in uncomplicated compressive fractures of the corpus vertebrae. Preliminary report. Ortop., travm. i protez. no.12:48 '61. (MIRA 15:2)

{INTERNAL FIXATION IN FRACTURES)
(VERTEBRAE--FRACTURE)

TSIV'YAN, Ya.L., starshiy nauchnyy sotrudnik (Novosibirsk 99, ul. Uritskogo, d.23, kv.6)

Late results of all-arthroplasty of the hip joint in a patient with hip stump. Ortop., travm.i protez. 22 no.3:63-64 '61.
(MIRA 14:4)

1. Iz ottdeleniya travmatologii i ortopedii (rukov, - Ya.L. TSiv'yan) Novosibirskogo nauchno-issledovatel'skogo instituta travmatologii i ortopedii (dir. - dotsent D.P. Metelkin).
(AMPUTATION STUMP)

TSIV'YAN, Ya. L., doktor med. nauk (Novosibirsk 99, ul. Uritskogo,
d. 23, kv. 6)

Transpleural and extraperitoneal surgical approaches in the
treatment of tuberculous spondylitis. Ortop., travm. i protez.
no. 3:12-14 '62. (MIRA 15:6)

1. Iz otdeleniya ortopedii i travmatologii dlya vzroslykh (ruko-
voditel' - Ya. L. TSiv'yan) Novosibirskogo nauchno-issledovatel'-
skogo instituta travmatologii i ortopedii (dir. - dotsent
D. P. Metelkin)

(SPINE—TUBERCULOSIS) (PLEURA—SURGERY)
(PERITONEUM—SURGERY)

TSIV'YAN, Ya.L., doktor med. nauk (Novosibirsk 99, ul. Urtskogo, d.23, kv.6)

Obturator dislocation of the femur with fracture of the femoral neck. Ortop., travm. i protez. 24 no.3:51-52
Mr '63. (MIRA 17:2)

1. Iz otdeleniya travmatologii i ortopedii (rukovoditel' - Ya.L. TSiv'yan) Novosibirskogo instituta travmatologii i ortopedii (dir. - dotsent D.P. Metelkin).

TSIV'YAN, Ya.L., doktor med. nauk (Novosibirsk, 99, ul. Uritskogo, d.37.
kv.86)

Some diseases of the spine, data from foreign literature.
Ortop., travm. i protez. 24 no.4:75-80 Ap'63. (MIRA 16:8)
(SPINE—DISEASES)

TSIV'YAN, Ya.L., doktor meditsinskikh nauk (Novosibirsk 99, ul. Uritskogo, d.37, kv.86)

Unusual case of osteochondrosis of the inferior thoracic intervertebral disk with compression of the spinal cord. Ortop., travm. i protez. 24 no.8:67-69 Ag '63.

(MIRA 17:1)

1. Iz otdeleniya ortopedii i travmatologii dlya vzroslykh (rukovoditel' - Ya.L. TSiv'yan) Novosibirskogo instituta travmatologii i ortopedii (dir. - dotsent D.P. Metelkin).

TSIV'YAN, Ya.L., prof. (Novosibirsk 99, ul. Uritskogo, d.37, kv.26)

Surgical treatment of severe forms of kyphoscoliosis. Ortop.,
travm. i protez. 25 no.6:54-55 Je '64. (MIRA 18:3)

1. Iz Novosibirskogo instituta travmatologii i ortopedii (dir. -
dotsent D.P. Metelkin).

TSIV'YAN, Ya. L., prof. (Novosibirsk 99, ul. Uritskogo, d. 37, kv. 86)

Some problems of pathology of the spine; based on materials
of foreign literature. Ortop., travm. i protez. 26 no.4:79-
86 Ap '65. (MIRA 18:12)

TSIV'YAN, Ya.L., prof.

Is surgical intervention justified in the treatment of spinal
fractures? Khirurgiia 40 no.5:20-28 My '64. (MIFA 18:2)

1. Otdeleniye travmatologii i ortopedii dlya vzroslykh Novosibirskogo
nauchno-issledovatel'skogo instituta travmatologii i ortopedii (dir.-
dotsent D.P. Metelkin).

TSIV'YAN, L. YA.

19990 TSIV'YAN, L. YA. Peredvizhnaya mnogoskorostnoy elektroprivod dlya sel'skogo khozyaystva. Avtoreferat. Elektricheskoe, 1949, No. 6, s. 51-53.

SO: LETOPIS ZHURNAL STATEY, Vol. 27, Moskva, 1949.

L 26059-66 EWT(m)/EWP(j) RM

ACC NR: AP5025130

SOURCE CODE: UR/0079/65/035/010/1819/1821

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BAUTHOR: Tsivunin, V. S.; Kamay, G. Kh.; Kormachev, V. V.ORG: Kazan Chemical Engineering Institute imeni S. M. Kirov (Kazanskiy khimiko-tehnologichesklyy institut)TITLE: Aliphatic-aromatic oxides and phosphine thio oxidesSOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1819-1821

TCPIC TAGS: Oxide formation, phosphorus chloride, halogenated organic compound, alkylphosphine, alkylphosphine oxide

ABSTRACT: One of the methods for obtaining oxides and thio oxides of phosphines is nucleophilistic decomposition of trialkyl(aryl)dihalogenophosphines. In order to obtain some examples of these types of compounds, the reaction of interaction of diethylchlorophosphine with benzoyl chloride and α -chlormethylnaphthalene was studied, since few similar reactions were described in the literature. It is known that trichloride phosphorus in the absence of third components does not react even with methyl iodide and dialkyl- and diarylchlorophosphines in ordinary conditions do not react with alkyl chlorides. Benzyl chloride and

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α -chloromethylnaphthalene are the exceptions in this relation, determined obviously by the presence of a conjugation. During their reaction with diethylchlorophosphine, after low temperature heating, white crystal adducts form which are extremely hydroscopic and smoke in the air. The ultimate analysis and quantity of hydrolyzed chlorine confirmed the structure of the adducts as of the diethylbenzyl- and diethyl- α -methylnaphthyl dichlorophosphines. Oxides and thio oxides of diethylbenzylphosphine and diethyl- α -methylnaphthylphosphine are derived by the decomposition of complexes, obtained by alcohols and hydrogen sulfide.

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Avtomatizatsiya energosistem i elektrostantsiy (Automatic Control in Power Systems and Electric Power Stations) Moscow, AN SSSR, 1957. 105 p. (Series: Obzory po zavoy tekhnike. Seriya "Energetika") 5,000 copies printed.

Sponsoring Agencies: 1. Gosudarstvennoye izdatel'stvo tekhnicheskoy literatury; 2. Akademiya Nauk SSSR; 3. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii.

Ed.: Chuprakov, N.M.; Tech. Ed.: Shvetsov, M.P.

PURPOSE: This monograph is addressed to power engineers and technicians interested in problems and recent developments in the automation and telemechanization of electric power plants and power systems.

COVERAGE: This brochure is a survey of problems in the automation of power systems insofar as they concern the joint operation of the electric power plants constituting each system, and the operation of

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interconnected power systems. Problems in the telemechanization of dispatcher control of power systems and interconnected power systems are also examined. Technical solutions concerning the automation of technological processes and of control in thermal and hydro-electric power stations are also discussed. Problems in the automation and telemechanization of electrical networks have not been made the object of an independent survey. For this reason they are discussed at the same time with problems of power system automation, briefly in the section on distributing networks (transit interstation and intersystem electric transmission lines) and more extensively in connection with the basic circuits determining the operation of power systems and their combinations. No personalities are mentioned. There are 34 references, of which 19 are Soviet, 13 English, and 1 French.

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12-5-58

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prom. 33 no.12:18-21 D '59. (MIRA 13:4)
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Investigating the dynamic properties of the gas dryer for fabrics
as a controllable object. Izv. vys. ucheb. zav.; tekhn. tekst. prom.
no. 3:159-166 '62. (MIRA 17:10)

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5(3)

AUTHORS: Tsizin, Yu. S., Tolkachev, O. N., sov/79-29-5-47/75
Volkova, L. V., Preobrazhenskiy, N. A.

TITLE: Research in the Synthesis of Curare Alkaloids.
(Sinteticheskiye issledovaniya v oblasti kurarealkaloidov).
Synthesis of 2-Oxy-3-Methoxy-5-(β -Nitrovinyl)-4'-Carboxy
Diphenyl Ether (Sintez 2-oxi-3-metoksi-5-(β -nitrovinil)-4'-
karboksidifenilovogo efira)

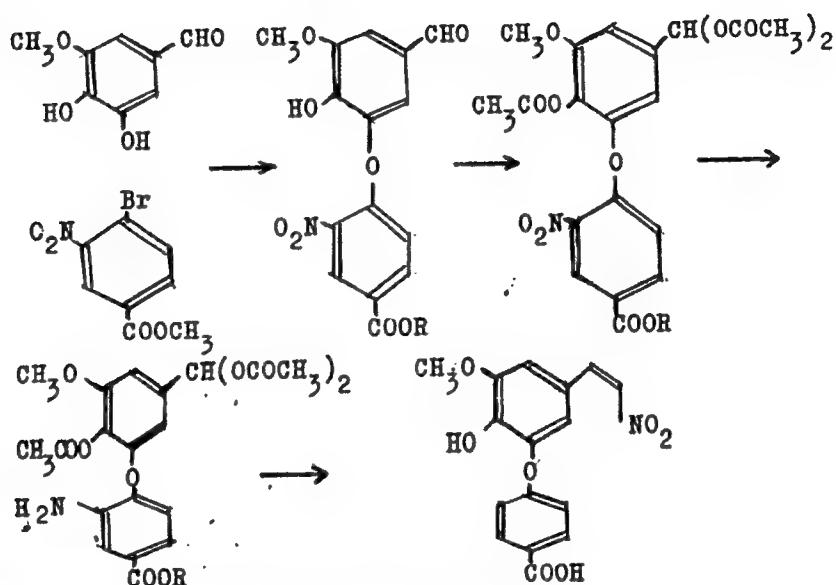
PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, № 5, pp 1631-1635
(USSR)

ABSTRACT: The compound was obtained in two ways: a) condensation of 5-bromo vanillin with methyl- or ethyl ester of 4-oxy-benzoic acid or b) condensation of 3-methyl-"gallus" aldehyde with the methyl ester of 4-bromo benzoic acid. In the reaction according to a) the ethyl ester is preferable as methyl ester leads to an impure product by the formation of anisic acid and its ester. In order to obtain better yields, a new course of synthesis was worked out:

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Research in the Synthesis of Curare
Alkaloids. Synthesis of 2-Oxy-3-Methoxy-5-(β -Nitrovinyl)-4'-Carboxy
Diphenyl Ether

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Research in the Synthesis of Curare
Alkaloids. Synthesis of 2-Oxy-3-Methoxy-5-(β -Nitrovinyl)-4'-Carboxy
Diphenyl Ether

SOV/79-29-5-47/75

The nitro group was reduced with nickel by catalysis, whereas the amino group was removed by reduction of diazonium salt with hypophosphoric acid. By reaction with nitro methane the compound mentioned in the title is obtained. The experimental part describes the reactions and gives the data concerning the compounds obtained. There are 4 references.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova (Moscow Institute of Fine Chemical Technology imeni Lomonosov)
SUBMITTED: May 5, 1958

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SO: Izvestiya Ak. Nauk Latvivskoy SSR, No. 9, Sept., 1955

TSIYELINS, E.A.

Change in the free choline content of preserved blood during storage.
Biokhimia 19 no.6:693-697 N-D '54. (MLRA 8:5)

1. Respublikanskaya stantsiya perelivaniya krovi, Riga.
(CHOLINE, in blood,
preserv. blood)
(BLOOD BANKS,
preserved blood, choline in)

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The influence of folic acid on resistance of the organism to tuberculosis. V. Strelko and P. Udeks (Inst. Microbiol. Acad. Sci. Latv. S.S.R. Riga). *Voprosy Pitaniya* 14, No. 5, 15-16 (1955).—On a prolonged feeding of a low-choline diet to white rats the natural resistance of the animal to tuberculosis was decreased. Addn. of folic acid to the diet (0.5 mg./100 g. feed) restored the resistance. The positive effect showed also the supplementary feeding of fresh lettuce 0.5 g. before and 10 g./rat/day after the infection with *Mycobacterium tuberculosis* var. *bovis*, resp., while vitamin B₁₂ (37, 100 g. feed) was without any definite effect. Folic acid and lettuce added to the daily rations increased the choline content in the liver and blood plasma of the animals; vitamin B₁₂ increased the choline content in the liver only.

E. Wierbicki

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Abs Jour : Ref Zhur Biol., No 1, 1959, 4185

Author : Tsiyelens, E.A., Skarde, I.K.

Inst : Institute of Experimental Medicine, Academy of Sciences
of Latvian SSR

Title : The Level of Free Choline in the Blood Serum of Cancerous Patients.

Orig Pub : Tr. In-ta eksperim. med. AN LatvSSR, 1956, 10, 209-214

Abstract : The content of free choline in the serum of 44 cancerous patients was within the limits of normal and approached the upper limit of normal in cancer of the stomach. -- T.A. Goryukhina

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